

ABSTRACT OF THE DISCLOSURE

A method and a system for calibrating the work function of a non-contact voltage sensor are provided. The method includes preparing a reference sample to have a stable
5 work function, measuring a voltage of the sample using a non-contact voltage sensor, and determining a work function correction factor of the sensor from the measured voltage. In turn, the calibrated work function may be used to adjust voltages of substrates measured by the sensor. A corona gun which includes a first electrode and one or more conductive rods is provided. In some embodiments, the conductive rods may be angled
10 between 0 and 90 degrees with respect to a first electrode sidewall and/or be concentrically arranged less than 90 degrees from each other. In addition or alternatively, the corona gun may be adapted to alter its length and/or include a second electrode partially inset within a space surrounded by the first electrode.